



Mr. Wesley Killingsworth
Center for Toxicology & Env. Health LLC
5120 North Shore Drive
North Little Rock, AR 72118

December 17, 2014

DOH ELAP #11626
AIHA-LAP #100324

Account# 13913

Login# L335752

Dear Mr. Killingsworth:

Enclosed are the analytical results for the samples received by our laboratory on December 17, 2014. All test results meet the quality control requirements of AIHA-LAP and NELAC unless otherwise stated in this report. All samples on the chain of custody were received in good condition unless otherwise noted.

Results in this report are based on the sampling data provided by the client and refer only to the samples as they were received at the laboratory. Unless otherwise requested, all samples will be discarded 14 days from the date of this report, with the exception of IOMs, which will be cleaned and disposed of after seven calendar days.

Current Scopes of Accreditation can be viewed at www.galsonlabs.com in the accreditations section under the "about Galson" tab.

Please contact Pamela Weaver at (888) 432-5227, if you would like any additional information regarding this report.

Thank you for using Galson Laboratories.

Sincerely,

Galson Laboratories

Mary G. Unangst
Laboratory Director

Enclosure(s)



LABORATORY ANALYSIS REPORT

6601 Kirkville Road
East Syracuse, NY 13057
(315) 432-5227
FAX: (315) 437-0571
www.galsonlabs.com

Client : Center for Toxicology & Env. Health LLC
Site : NS
Project No. : 106846
Date Sampled : 15-DEC-14
Date Received : 17-DEC-14
Date Analyzed : 17-DEC-14
Report ID : 863081

Account No.: 13913
Login No. : L335752

Respirable Dust and Crystalline Silica: Quartz, Cristobalite, Tridymite

Sample ID	Lab ID	Analyte	Air Vol				Dust
			l	mg	%	mg/m3	PEL mg/m3
SACA1215SI001	L335752-1	Dust	1088.97	<0.050		<0.046	5.0
		Quartz	1088.97	<0.0050	ND	<0.0046	
SACA1215SI002	L335752-2	Dust	1039.74	<0.050		<0.048	5.0
		Quartz	1039.74	<0.0050	ND	<0.0048	
^ SACA1215SI003	L335752-3	Dust	NA	-0.17		NA	NA
		Quartz	NA	<0.0050	ND	NA	

COMMENTS: Please see attached lab footnote report for any applicable footnotes.

Level of quantitation:	Dust 0.050mg Q:0.0050mg	Submitted by:	PAH/MNS/CMR
Analytical Method	: mod. NIOSH 0600/7500/mod. OSHA ID-142; Gr	Approved by:	CRI/KRK
OSHA PEL	: see 1910.1000 (Table Z-3)	Date:	17-DEC-14 NYS DOH #: 11626
Collection Media	: PVC PW 37mm	Supervisor:	KRK/CRI QC by: JEM

< -Less Than	mg -Milligrams	m3 -Cubic Meters	kg -Kilograms
> -Greater Than	ug -Micrograms	l -Liters	NS -Not Specified
NA -Not Applicable	ND -Not Detected	ppm -Parts per Million	
mppcf -Million Particles per Cubic Foot			



LABORATORY FOOTNOTE REPORT

6601 Kirkville Road
East Syracuse, NY 13057
(315) 432-5227
FAX: (315) 437-0571
www.galsonlabs.com

Client Name : Center for Toxicology & Env. Health LLC
Site :
Project No. : 106846

Date Sampled : 15-DEC-14
Date Received: 17-DEC-14
Date Analyzed: 17-DEC-14

Account No.: 13913
Login No. : L335752

Unless otherwise noted below, all quality control results associated with the samples were within established control limits or did not impact reported results.

Unrounded results are carried through the calculations that yield the final result and the final result is rounded to the number of significant figures appropriate to the accuracy of the analytical method. Please note that results appearing in the columns preceding the final result column may have been rounded in order to fit the report format and therefore, if carried through the calculations, may not yield an identical final result to the one reported.

The stated LOQs for each analyte represent the demonstrated LOQ concentrations prior to correction for desorption efficiency (if applicable).

Unless otherwise noted below, reported results have not been blank corrected for any field blank or method blank.

^L335752-3 (Report ID: 863081):

Dust result(s) more negative than the LOQ. Results may be biased low.

L335752 (Report ID: 863081):

Dust analytical accuracy is within +/- 0.008 mg (95% confidence interval or k=2). The estimated uncertainty applies to the media, technology, and SOP(s) referenced in this report and does not account for any uncertainty associated with the sampling process.

The blank value has been verified. Sample results have not been corrected for the blank value.

A laboratory blank was prepared and analyzed with the samples. The laboratory blank concentration was less than the detection limit.

SOPs: GRAV-SOP-5(9), GRAV-SOP-6(8), ix-calibrate(10), ix-xrdashprep(22), ix-xrdreview(10), ix-xrstdprep(23)

L335752 (Report ID: 863081):

Accuracy and mean recovery data presented below is based on a 95% confidence interval (k=2). The estimated uncertainty applies to the media, technology, and SOP referenced in this report and does not account for the uncertainty associated with the sampling process.

Parameter	Accuracy	Mean Recovery
Quartz	+/-11.6%	97.1%

< -Less Than mg -Milligrams m3 -Cubic Meters kg -Kilograms
> -Greater Than ug -Micrograms l -Liters NS -Not Specified
NA -Not Applicable ND -Not Detected ppm -Parts per Million

Client Center for Toxicology & Env. Health LLC
Account No. 13913
Login No. 1335752

[illegible]



XRD QC SUMMARY REPORT

Login: L335752

Matrix: 306 PVC PW 37mm

Method: mod. NIOSH 0600/7500/mod. OSHA ID-142; Grav./XRD

Reporting Level (primary angle): Cristobalite 10 ug, Quartz 5 ug, Tridymite 20 ug

Type	Sample #	Analysis Date	Parameter	True Value ug	Found Value ug	Recovery %	RPD %	Control Limits Recovery	RPD
CCV xrd_angle1	WG303613-1	12/17/14 09:05	Cristobalite	50.0	43.0	86.0		80.1 to 121.	
			Quartz	50.1	49.3	98.5		86.5 to 113.	
DLS2 xrd_angle2	WG303613-5	12/17/14 10:01	Quartz	25.0	24.2	96.8		70.0 to 130.	
DLS3 xrd_angle1	WG303613-6	12/17/14 10:16	Cristobalite	5.00	4.19	83.8		70.0 to 130.	
			Quartz	5.01	4.82	96.3		70.0 to 130.	
CCV xrd_angle1	WG303613-7	12/17/14 11:11	Cristobalite	50.0	42.3	84.7		80.1 to 121.	
			Quartz	50.1	48.6	97.0		86.5 to 113.	
BS xrd_angle1	WG303583-2	12/17/14 13:12	Cristobalite	100.	95.9	95.9		79.4 to 122.	
			Quartz	100.	103.	103.		79.6 to 115.	
BSD xrd_angle1	WG303583-3	12/17/14 13:26	Cristobalite	100.	92.1	92.1	4.09	79.4 to 122.	-15.1 to 15.0
			Quartz	100.	97.9	97.9	5.23	79.6 to 115.	-16.4 to 16.3
CCV xrd_angle1	WG303613-9	12/17/14 14:09	Cristobalite	50.0	43.0	86.1		80.1 to 121.	
			Quartz	50.1	49.8	99.6		86.5 to 113.	
CCV xrd_angle1	WG303613-11	12/17/14 15:54	Cristobalite	50.0	42.3	84.7		80.1 to 121.	
			Quartz	50.1	49.1	98.0		86.5 to 113.	

GRAVIMETRICS QC SUMMARY REPORT

Login: L335752
Matnum: 56
Matrix: PVC PW
Instrument Description: Mettler MX-5, M2
Method: mod. NIOSH 0600; GRAV
Reporting Level (mg): 0.050 mg

Type	Sample #	Analysis Date	True Value (mg)	Found Value (mg)	Abs. Val. of mg Difference	Control Limit (mg)
CCV	WG303661-1	12/17/2014 12:06:00	19.952	19.946	0.006	0.012
BLANK	WG303618-3	12/17/2014 08:57:00	13.624	13.615	0.009	0.012
CCV	WG303661-3	12/17/2014 12:08:00	19.952	19.945	0.007	0.012

Type	Sample #	Analysis Date	Sample Result (mg)	Duplicate Result (mg)	Abs. Val. of mg Difference	Control Limit (mg)
DUP	WG303661-2	12/17/2014 12:08:00	-0.171	-0.171	0.000	0.005

Dup Workgroup number WG303661-2
Sample number L335752-3

Instrument Description: Mettler XP-6, M4

Type	Sample #	Analysis Date	True Value (mg)	Found Value (mg)	Abs. Val. of mg Difference	Control Limit (mg)
CCV	WG303663-1	12/17/2014 12:13:00	19.961	19.961	0.000	0.012
BLANK	WG303606-4	12/17/2014 07:46:00	13.517	13.516	0.001	0.012
CCV	WG303663-4	12/17/2014 12:16:00	19.961	19.958	0.003	0.012

Type	Sample #	Analysis Date	Sample Result (mg)	Duplicate Result (mg)	Abs. Val. of mg Difference	Control Limit (mg)
DUP	WG303663-3	12/17/2014 12:15:00	0.010	0.011	0.001	0.005

Dup Workgroup number WG303663-3
Sample number L335752-1

5120 North Shore Dr.
North Little Rock, AR 72118
Phone: (501) 801-8500
Fax: (501) 801-8501
Website: www.cteh.com

Center for Toxicology and Environmental Health L.L.C.

SAMPLE CHAIN OF CUSTODY AND ANALYSIS REQUEST FORM

Page 1 of 1

Send Report To:		Send Invoice To:	
Name	Wesley Killingsworth	Accounts Payable	
Company	CTEH	CTEH	
Address	5120 North Shore Dr. North Little Rock, AR 72118		
Phone	(501)801-8500		
Fax	(501)801-8501		
e-mail	W.Killingsworth@cteh.com		

Lab Contact Information:	Units (Check one)	Sample Date	Sample Time (for non-air samples)	Initials	Matrix
Realson Labs	<input checked="" type="checkbox"/> L <input type="checkbox"/> cm ²				A = air B = bulk S = soil SW = wipe T = tape W = water
6601 Kirkville Rd.					
Syracuse, NY, 13057					
Client Sample Identification					

14-0991591	1088.92	L	12/15/14	1	SEA	✓	A							
14-0991577	1037.74	L	12/15/14	1	SEA	✓	A							
14-0887254	0	L	12/15/14	1	SEA	✓	A							

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
ERIC SIMON 1/14	12-16-14/1705	Eric Simon	12/17/14 9:37
Rec'd intact & all accounted for? Yes or No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Rec'd w/custody seals intact? Yes or No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Rec'd in light sensitive packaging? Yes or No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Rec'd with ice pack? Yes or No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Rec'd temperature compliant? Yes or No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			